PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's o	r agent's file reference								
4029	0129WO FRI/MKU/	FOR FURTHER ACTION	See Form PCT/IPEA/416						
International	application No.	International filing date (day/month/year)	Priority date (day/month/year)						
PCT/E	P2004/003895	13.04.2004	11.04.2003						
International Patent Classification (IPC) or national classification and IPC									
Applicant									
SCHUN	K GMBH & CO. KG								
	 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 								
2. Th	2. This REPORT consists of a total of 6 sheets, including this cover sheet.								
3. Th	is report is also accompanied by A	NNEXES, comprising:							
a.	(sent to the applicant and	to the International Bureau) a total of 8	sheets, as follows:						
			n amended and are the basis for this report and/or						
	sheets containing re Instructions).	ectifications authorized by this Authority (see	Rule 70.16 and Section 607 of the Administrative						
			onsiders contain an amendment that goes beyond						
1	Box.	e international application as filed, as indicat	ed in item 4 of Box No. I and the Supplemental						
Ь.	(sent to the International	Bureau only) a total of (indicate type and num	nber of electronic carrier(s))						
	, containing a sequence listing and/or tables								
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).									
	nis report contains indications relat	ing to the following items:							
	Box No. I Basis of th	e report							
	Box No. II Priority								
	Box No. III Non-establ	ishment of opinion with regard to novelty, inv	entive step and industrial applicability						
	Box No. IV Lack of un	ity of invention							
		statement under Article 35(2) with regard to no and explanations supporting such statement	ovelty, inventive step or industrial applicability;						
	Box No. VI Certain documents cited								
	Box No. VII Certain defects in the international application								
	Box No. VIII Certain ob	servations on the international application							
Date of sub	mission of the demand	Date of completion o	f this report						
			•						
Name and r	nailing address of the IPEA/EP	Authorized officer							
Facsimile N	Jo	Telephone No.							
_ Committee I		Telephone 110.							

Translation

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/003895

Box	No. I	Basis of the report							
1.		h regard to the language, this report is based on the international cated under this item.	application in the language in v	which it was filed, unless otherwise					
		This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:							
		international search (Rule 12.3 and 23.1(b))	international search (Rule 12.3 and 23.1(b))						
		publication of the international application (Rule 12.4)	publication of the international application (Rule 12.4)						
		international preliminary examination (Rule 55.2 and/or	international preliminary examination (Rule 55.2 and/or 55.3)						
2.	rece	h regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the viving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to report):							
		the international application as originally filed/furnished							
	\boxtimes	the description:							
		pages		as originally filed/furnished					
		pages* 1-4	received by this Authority on	17.02.2005 with the letter of 14.02.2005					
		pages*	received by this Authority on						
	\boxtimes	the claims:							
		nos.		as originally filed/furnished					
		nos.*	as amended (togethe	r with any statement) under Article 19					
			received by this Authority on	17.02.2005 with the					
		nos.*							
	\boxtimes	the drawings:	, ,						
		sheets 1/4-4/4		as originally filed/firmished					
			received by this Authority on	as originally filed/furnished					
		sheets*							
		1							
		a sequence listing and/or any related table(s) – see Supplemer	ntal Box Relating to Sequence L	asting.					
3.	Ш	The amendments have resulted in the cancellation of:							
		the description, pages							
		the claims, nos.	the claims, nos.						
		the drawings, sheets/figs	the drawings, sheets/figs						
		the sequence listing (specify):							
		any table(s) related to sequence listing (specify):							
4.		This report has been established as if (some of) the amendment they have been considered to go beyond the disclosure as file	ents annexed to this report and d, as indicated in the Supplemen	listed below had not been made, since ntal Box (Rule 70.2(c)).					
		the description, pages							
		the claims, nos.	the claims, nos.						
		the drawings, sheets/figs	- · · · · · · · · · · · · · · · · · · ·						
		the sequence listing (specify):							
		any table(s) related to sequence listing (specify):							
<u> </u>	If ite	tem 4 applies, some or all of those sheets may be marked "super	rseded."						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/003895

Box	No. V Reasoned statement citations and expla	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1.	Statement				
	Novelty (N)	Claims	1-19	YES	
		Claims		NO	
	Inventive step (IS)	Claims Claims	1-19	YES NO	
	Industrial applicability (IA)	Claims Claims	1-19	YES NO	
2.	Citations and explanations (Rule				

Reference is made to the following documents:

D1: DE 36 13 484 A (HARTMANN SIEGFRIED)

29 October 1987 (1987-10-29)

D2: EP 0601736 A1

Ι INDEPENDENT CLAIM

Document D1 is considered the prior art closest to 1. the subject matter of claim 1 and discloses (the references between parentheses refer to that document):

> a rotating or pivoting device comprising a housing (3), a working piston (4) that is accommodated in the housing (3) and that can be impinged upon by pressurised means and a pivoting part (7) which is rotatably driven by the working piston (4) via a rotary coupling (7) and is rotatably mounted in the housing (3), the working piston (4) being displaceably mounted in a cylindrical tube (1) which is connected to the housing and the free end of the cylindrical tube (1) near to the housing

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

comprising a connection module (10).

1.2. The subject matter of claim 1 thus differs from the known device in that the cylindrical tube can be screwed into the housing using a screw thread and in that the cylindrical tube comprises a screw thread for screwing on the connection module, the connection module (62, 64, 92, 112) being sealed on its radially outer lying side relative to the housing (12) such that an air chamber (84) connected to each pressure chamber (32, 34, 36, 38) is formed, it being possible to connect said air chambers to the pressure line via connections (86) on the housing side.

The subject matter of claim 1 is thus novel (PCT Article 33(2)).

- 1.3. The present invention can therefore be considered to address the problem of guaranteeing secure air conduction irrespective of the screwing-in depth of the connection module and of not altering the position of the connections on the housing side for different screwing-in depths (see also the original page 3, last paragraph and the original page 10, second paragraph).
- 1.4. The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons: none of the documents found during the proceedings provides for the connection

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

module being sealed on its radially outer lying side relative to the housing such that an air chamber connected to each pressure chamber is formed, it being possible to connect said air chambers to the pressure line via connections on the housing side. The searched prior art therefore cannot render obvious this feature. There is also nothing else that would prompt a person skilled in the art to configure a known rotating or pivoting device in this way.

1.5. Document D2 discloses a rotating or pivoting device in which the cylindrical tube can be screwed into the housing using a screw thread and in which the cylindrical tube has a screw thread for screwing on the connection module, but that document does not show any air chambers which are connected to the each pressure chamber and can be connected to a pressure line via connections on the housing side.

II DEPENDENT CLAIMS

2. Claims 2-19 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.

III INDUSTRIAL APPLICABILITY

The subject matter of claims 1-19 can be made and used and is therefore considered industrially applicable.

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement